

Decimal-Fraction Olympics

Students use fractions and decimals to describe their proficiency in simple classroom athletics.

PREPARATION

Clear a space in the classroom large enough to allow student to toss a beanbag or foam ball into an empty trash can from about 12 feet away. Use masking tape to mark a line on the floor where students are to stand.

DIRECTIONS

1. Explain to students that they will be shooting baskets and recording their tries to write fractions and decimals. Appoint a scorekeeper. Ask each team to step up to the mark on the floor and take turns trying to shoot baskets. Have each student make two sets of five shot: Trial 1 and Trial 2. Ask students to name a fraction that shows the successful number of shots out of the given number of attempts.
2. Ask students to analyze their data. What fraction of the shots did each player make? What fraction of the shots did the team make? What fraction did the whole class make? You may wish to review certain concepts, such as how to use the data to generate a fraction. Each fraction might be expressed this way:

$$\frac{\text{Number of successful shots}}{\text{Number of attempted shots}}$$

To convert their fractions to decimals, remind students they can divide the numerator by the denominator.

EXTENSION

Challenge students to convert their fraction or decimal numbers into decimals, and then percentages. Their goal might be to answer this question: What percentage of your shots did you make?



Grouping

Small groups



You'll Need

◆ Paper

◆ Pencils

◆ Soft beanbag or foam ball

◆ Trash can

Teaching Tip



If you have more balls set up several shooting stations.